

Curriculum Crosswalk Template

Course: Food Science

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Date: 2012

Program Area: Family and Consumer Sciences

The student will:

Present Tense/Action Verb	Adjective	Object (limit to one object)	Method of Evaluation/Assessment	Idaho State Achievement Standard	National Standard
1.0 Explore the World of Food as a Science					9.0, 14.0
Describe	scientific food	study	create a graph	W.11-12.2	
Describe	food nutrient	sources	create poster of nutrients	W.11-12.2	
Explain	food dietary	guidelines	present information to class	W.11-12.2 SL.11-12.1	
Describe	human nutritional	needs	research human physical needs	W.11-12.2	
Explain	nutrient	purposes	list roles of nutrients	W.11-12.2	
Compare	nutrient rich/poor	foods	contrast foods	W.11-12.2 W.11-12.8	
Explain	laboratory safety	guidelines		W.11-12.2	

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				SL.11-12.1	
Explore	scientific food evaluation	methods	calculate metric measurements	N-Q.1	
Demonstrate	scientific evaluation of food	methods	record, measure, graph & report food science experimental data	F-LE.2 N-Q.1 W.11-12.2	
2.0 Explore chemistry in food science					9.0
Explain	chemistry	matter	define chemical terminology	WHST.11-12.2	
Interpret	6 areas in chemistry to food science	relationship	formulate a poster	RST.11-12.2 WHST.11-12.2	
Demonstrate	water	boiling point	calculate temperature readings using customary & metric readings	N-Q.1	
Describe	periodic table	organization	use table	WHST.11-12.2	
Explain	chemical	bonding		WHST.11-12.2	
Describe	food chemical	reactions		WHST.11-12.2	

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Explain	atomic	structure		WHST.11-12.2	
Explore	atoms, elements, molecules	structure		RST.11-12.2 WHST.11-12.2	
3.0 Explore the Application of Food Science and Nutrition					9.0, 14.0
Identify	food preference	factors	develop a panel	WHST.11-12.2	
Differentiate	physical/chemical in foods	changes	identify foods that undergo chemical/physical changes when cut	RST.11-12.2 WHST.11-12.2	
Explain	sensory food	evaluation	create a food/odor sensory panel & design an illustrated talk	RST.11-12.2 WHST.11-12.2 SL.11-12.1	
Describe	food	energy		WHST.11-12.2	
Describe	water	properties	illustrate water molecule	WHST.11-12.2	
Examine	carbohydrate	nutrient	define carbohydrate	RST.11-12.2 WHST.11-12.2	
Investigate	lipid	nutrients	contrast fats & oils	RST.11-12.2 WHST.11-12.2	

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Examine	protein	nutrient	distinguish between the 3 types of protein; demonstrate coagulation & denaturation in food preparation	RST.11-12.2 WHST.11-12.2	
Examine	vitamin	nutrients	distinguish between fat soluble and water soluble vitamins	RST.11-12.2 WHST.11-12.2	
Examine	mineral	nutrients	list the consequences of excesses	RST.11-12.2 WHST.11-12.2	
Explore	process	metabolism	calculate caloric needs of self	N-Q.1	
4.0 Demonstrate Chemical Processes Involved in Food Preparation					9.0
Demonstrate	enzymes on foods	affects	record effects of enzymes in food experiments	WHST.11-12.2	
Examine	pH	foods	compare pH in different foods using pH indicator	WHST.11-12.2 N-Q.1	

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Examine	food solutions, dispersions, emulsions	properties	prepare foods	WHST.11-12.2	
Demonstrate	leavening	processes	compare different types of leavening products in baking	WHST.11-12.2	
Describe	chemical & natural	leaveners	distinguish between quick breads & yeast breads	WHST.11-12.2	
Analyze	food	fermentation	demonstrate the purpose of lactobacillus in the process of fermentation	WHST.11-12.2 WHST.11-12.8	
Explain	food	fermentation	demonstrate the scientific method in an experiment making pickles	WHST.11-12.2	
Describe	milk chemistry	changes		WHST.11-12.2	
5.0 Examine Microbiology in Food Processing and Preparation					9.0, 14.0
Explain	food legislation	impact	food legislation in	SL.11-12.1	

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			government	RST.11-12.1 RST.11-12.2 RST.11-12.5 WHST.11-12.2	
Explain	food borne illness	causes	describe the consequences of failure to maintain food safety and quality	WHST.11-12.2 WHST.11-12.8	
Describe	food borne illness	prevention		WHST.11-12.2	
Demonstrate	freezing, dehydration	procedures	develop a brochure on restaurant sanitation procedures	WHST.11-12.2 WHST.11-12.4 WHST.11-12.5 WHST.11-12.6 WHST.11-12.8	
Explore	canning safety	procedures	demonstrate safety skills in water bath canning	RST.11-12.2	
Explain	additives	food	prepare a presentation on food additives, advantages & disadvantages	WHST.11-12.2 WHST.11-12.4 WHST.11-12.5 WHST.11-12.6 WHST.11-12.8	
Examine	laws	food	explain the purpose of the "GRAS" list	WHST.11-12.2	

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6.0 Explore Career, Technology and Consumer Education in Food Science and Nutrition					2.0, 9.0
Analyze	paths in food science	careers	complete a research project on a specific career	RL.11-12.2 RL.11-12.4 WHST.11-12.2 WHST.11-12.4 WHST.11-12.5 WHST.11-12.6 WHST.11-12.8 SL.11-12.1 SL.11-12.4	
Describe	food science	trends	list new products you find in a grocery store	WHST.11-12.2	
Examine	food science consumer	issues		RL.11-12.2 RL.11-12.4 WHST.11-12.2 SL.11-12.1	

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